

Appendix D: Aerosol Transmissible Laboratory Pathogens for Research Laboratory and Production Facilities

This list of agents includes those pathogens for which CDC (ref. HICPAC, BMBL) specifically recommends aerosol control and/or Biosafety Level 3.

Adenovirus (HICPAC)

Arboviruses (production quantities or concentrations* of arboviruses for which CDC recommends Biosafety Level 2, e.g. dengue virus, western equine encephalomyelitis, eastern equine encephalomyelitis)

Arboviruses (potentially infectious clinical materials, cultures, infected animals, and infected arthropods involving arboviruses for which CDC recommends Biosafety Level 3 or higher, e.g. Japanese encephalitis, West Nile virus, Yellow Fever)

Arenaviruses (production quantities or concentrations of arenaviruses for which CDC recommends Biosafety Level 2, e.g. Tamiami virus)

Arenaviruses (potentially infectious clinical materials, cultures, infected animals, and infected arthropods involving arenaviruses for which CDC recommends Biosafety Level 3 or higher, e.g. Flexal virus)

Bacillus anthracis (high potential for aerosol production, production quantities or concentrations)

Bordetella pertussis (aerosol production, production quantities or concentrations)

Brucella abortus, *B. canis*, *B. melitensis*, *B. suis* (cultures, experimental animal studies)

Burkholderia (Pseudomonas) mallei (high potential for aerosol or droplet production, production quantities or concentrations)

Chlamydia psittaci, *C. pneumoniae*, *C. trachomatis* (high potential for aerosol or droplet production, production quantities or concentrations)

Clostridium botulinum (high potential for aerosol or droplet production, production quantities of toxin)

Coccidioides immitis (sporulating cultures, processing environmental materials known or likely to contain infectious arthroconidia)

Corynebacterium diphtheriae (HICPAC)

Coxiella burnetti (inoculation, incubation, and harvesting of embryonate eggs or cell cultures; experimentally infected rodents, necropsy of infected animals, handling infected tissues)

Eastern equine encephalomyelitis virus (production quantities or concentrations, infection of newly hatched chickens)

Filoviruses

Francisella tularensis (cultures, experimental animal studies)

Haemophilus influenzae, type b (HICPAC)

Hantaviruses (serum or tissue from potentially infected rodents, tissue from potentially infected non-rodent species, high potential for aerosol production, inoculation of permissive animal species, culture, handling concentrated virus, production quantities)

Hendra, Hendra-like viruses

Herpes simplex viruses 1 and 2 (HICPAC)

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Herpesvirus simiae (consider for any material suspected to contain virus, mandatory for any material known to contain virus, propagation for diagnosis, cultures)
Histoplasma capsulatum (cultures, processing environmental materials known or likely to contain infectious conidia)
Influenza virus - 1918 strain, noncontemporary human strains (H2N2), highly pathogenic avian strains (H5N1)
- Human, avian (HICPAC)
Legionella pneumophila, other Legionella-like agents (aerosol production, production quantities or concentrations)
Lymphocytic choriomeningitis virus (field isolates and clinical materials from human cases, infected transplantable tumors, infected hamsters, high potential for aerosol production, production quantities or concentrations)
Measles virus (HICPAC)
Monkeypox virus
Mumps virus (HICPAC)
Mycobacteria bovis, *M. tuberculosis* (cultures, experimental animal studies with infected nonhuman primates)
Mycoplasma pneumoniae (HICPAC)
Neisseria gonorrhoeae (consider for aerosol or droplet production, production quantities or concentrations)
Neisseria meningitidis (high potential for aerosol or droplet production, production quantities or concentrations)
Parvovirus B19 (HICPAC)
Poliovirus (cultures and potentially infectious materials of wild-type polioviruses)
Prions - human, bovine spongiform encephalopathy (cultures, experimentally infected transgenic mice that produce human prions or nonhuman primates)
Rabies virus (high potential for aerosol or droplet production, production quantities or concentrations)
Rickettsia prowazekii, *R. typhi*, *R. tsutsugumushi*, Spotted Fever Group (propagation, inoculation, incubation, and harvesting of embryonate eggs or cell cultures, experimental animal studies)
Retroviral vectors (human retroviruses, xenotropic infectious clones)
Rubella virus (HICPAC)
SARS-associated Coronavirus
Simian immunodeficiency virus (cultures, concentrated virus, potential for aerosol or droplet production, production quantities or concentrations)
Streptococcus, group A (HICPAC)
Varicella zoster virus (HICPAC)
Vesicular stomatitis virus (tissues or virulent isolates from infected livestock)
Western equine encephalitis virus (production quantities or concentrations, infection of newly hatched chickens)
Yersinia pestis (antibiotic resistant strains, high potential for aerosol or droplet production, production quantities or concentrations)

* 'Production quantities or concentrations' are defined in the BMBL.